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**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Further
Develop a Risk-Based Decision-Making
Framework for Electric and Gas Utilities.

Rulemaking 20-07-013
(Filed July 16, 2020)

**RESPONSE OF PACIFIC GAS AND ELECTRIC COMPANY
TO ASSIGNED COMMISSIONER'S RULING REGARDING DEVELOPMENT OF
SAFETY AND OPERATIONAL METRICS**

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TABLE OF CONTENTS

I.	Procedural Background and the Safety and Operational Metrics in Context.....	2
II.	PG&E’s Proposed Slate of Safety and Operational Metrics	5
	A. Selection Criteria and Objectives	7
	B. Definitions and Key Characteristics	10
	1. SIF—Actual (Employee & Contractor)	10
	2. SIF—Potential (Employee & Contractor).....	11
	3. Gas Dig-In Rate.....	11
	4. Large Overpressure Events	12
	5. Gas Emergency Response Time.....	12
	6. Reportable Fire Ignitions.....	13
	7. Transmission and Distribution Wires Down	13
	8. Electric Emergency Response Time	13
	9. Safe Dam Operating Capacity	14
	10. DCPD Reliability & Safety Indicator	14
	11. SAIDI (Unplanned).....	15
	12. Average Speed of Answer for Emergencies	15
	C. Relationship to Other Enhanced Enforcement Triggers.....	15
III.	Future Steps in This Proceeding.....	18
IV.	Conclusion	19

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PG&E respectfully responds to the November 17, 2020 Assigned Commissioner’s Ruling that opened Track 2 of this rulemaking and directed PG&E to propose Safety and Operational Metrics (SOMs) for consideration at a January 28, 2021 workshop.¹ The Assigned Commissioner’s Ruling directed PG&E to propose SOMs that, among other things, are “suitable for use as triggering events as specified in the Enhanced Oversight and Enforcement Process (“Enhanced Enforcement Process”) approved in Decision (D.) 20-05-053,” and “suitable, over time, for the Commission, intervenors, and the public to potentially use to gauge the safety and operational performance of all gas and electric IOUs.”²

PG&E in this filing proposes and describes SOMs that meet the specific requirements of the Assigned Commissioner’s Ruling, enable and support the Enhanced Enforcement Process, and build on the Commission’s, industry’s, and interested public’s extensive work to date on metrics specifically and risk-based decision-making more generally.

PG&E appreciates that this process, like previous metric-setting efforts, will be collaborative. PG&E looks forward to discussing these proposals at the January 28th workshop and to working with the Commission and parties throughout the process.

¹ Assigned Commissioner’s Ruling Regarding Development of Safety and Operational Metrics, R.20-07-013 at 1-2 (Nov. 17, 2020) (“Assigned Commissioner’s Ruling”).

² Assigned Commissioner’s Ruling at 1-2.

I. PROCEDURAL BACKGROUND AND THE SAFETY AND OPERATIONAL METRICS IN CONTEXT

The need for these SOMs arises out of the Commission’s decision approving PG&E’s plan of reorganization (“the POR Decision”), D.20-05-053,³ and the conditions on that approval. Specifically, the Commission’s approval of PG&E’s POR established an Enhanced Enforcement Process under which PG&E can face increasing levels of reporting and operational oversight upon the occurrence of certain identified triggering events. There are a range of possible triggering criteria: Some are specific and defined as part of the POR Decision itself, like a “fail[ure] to obtain an approved wildfire mitigation plan”; others require more definition, like the SOMs, metrics “set forth in [PG&E’s] wildfire mitigation plan,” and “electric reliability performance metrics” that can trigger Steps 1 and 2 of Enhanced Enforcement.⁴ Accordingly, the POR Decision provided that PG&E would subsequently provide, in a separate proceeding, “attainable Safety and Operational Metrics that, if achieved, would ensure that PG&E provides safe, reliable and affordable service.”⁵

Track 2 of this OIR is the proceeding contemplated by the POR Decision to establish those attainable SOMs—not only for purposes of PG&E’s Enhanced Enforcement triggers, but in a manner that can be used to strengthen the risk-based decision-making framework of other utilities, as well.⁶

This context is important for three key reasons. First, the choice of SOMs and their design should be driven by the purposes they are to serve. While well-designed metrics should focus on results that are within the utility’s control or influence, so as to provide meaningful measures of the utility’s performance, and not just measures of fortuitous events, particular metrics well suited to some purposes may not be optimal, or even appropriate, for others. Some metrics are appropriate for incentivizing

³ Decision Approving Reorganization Plan, D.20-05-053 (June 1, 2020) (“POR Decision”).

⁴ POR Decision, Appx. A at 1-3, D.20-05-053 (May 28, 2020).

⁵ POR Decision at 38.

⁶ Order Instituting Rulemaking to Further Develop a Risk-Based Decision-Making Framework for Electric and Gas Utilities at 2, R.20-07-013 (July 24, 2020).

employees, others provide valuable data for management decisions, some are purely retrospective, and still others help orient organizations towards important behaviors. The SOMs chosen in this proceeding must be suitable for the particular purposes that the Enhanced Enforcement Process and Assigned Commissioner's Ruling have designated: *triggers for enforcement* decisions for PG&E, and *gauges of performance* of gas and electric utilities more generally.⁷

The Commission has recognized that much work has been done already on a number of metrics that PG&E uses and reports. Among other things, twenty-six key Safety Performance Metrics have already been identified through the S-MAP process;⁸ Wildfire Mitigation Plans are required to include a variety of data;⁹ and technical working groups have spent years on these issues.¹⁰ But the Assigned Commissioner's Ruling does not contemplate simply re-incorporating all of the various metrics that have emerged through those proceedings, and not all twenty-six Safety Performance Metrics are suitable to be SOMs. Thus, while the Assigned Commissioner's Ruling reminds PG&E and the parties to leverage what has been learned and to "develop [SOMs] primarily by drawing on existing safety and operational metrics,"¹¹ it also directs that the SOMs themselves should "include the *most relevant and meaningful* safety metrics from those previously adopted," in addition to whatever other metrics are useful for the SOMs' purposes.¹²

Second, and relatedly, the SOMs will be just one part of a larger framework of important metrics. They should not be viewed in isolation. Within the Enhanced Enforcement Process itself,

⁷ Assigned Commissioner's Ruling at 1-2.

⁸ Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities at Attach. 1, D.19-04-020 (May 6, 2019).

⁹ E.g., Administrative Law Judge's Ruling on Wildfire Mitigation Plan Templates and Related Material and Allowing Comment, R. 18-10-007, Attach. 1, WMP Guidelines (Dec. 16, 2019).

¹⁰ Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities at Attach. 1, D.19-04-020 (May 6, 2019).

¹¹ Assigned Commissioner's Scoping Memo and Ruling at 3-4, R.20-07-013 (Nov. 2, 2020).

¹² Assigned Commissioner's Ruling at 2 (emphasis added).

numerous factors, other than SOMs, can serve as triggers, from failures related to PG&E's Wildfire Mitigation Plan to metrics arising from the Company's safety culture assessment.¹³ The SOMs need not capture everything. PG&E has not included in its suite of SOMs other metrics that could be duplicative and inconsistent with other Enhanced Enforcement metrics. The SOMs are only one of several enforcement-related triggers, all of which taken together are part of a significantly larger suite of important information—and outside of the enforcement context, PG&E will continue to report a wide range of performance-related data, including the Safety Performance Metrics.

Finally, third, the metrics—and this Track 2 process—should consider the future. The Commission's previous efforts and rulings concerning metrics have consistently recognized that identifying appropriate metrics is difficult and time-consuming,¹⁴ that the Commission, utilities, and parties learn from experience, and that selected metrics should not be etched in stone. "Metrics may need to be revised over time,"¹⁵ and benefit from an ability to evolve quickly as lessons are learned.¹⁶ PG&E does not advocate discarding or replacing metrics haphazardly. To the contrary, while metrics can change organizations and culture, they cannot do their work if they are changed indiscriminately. But this process, and the metrics that result, must also recognize that the SOMs and the targets under them may need to evolve. Recognizing that at the outset will help develop the best possible set of SOMs now and add to the value of the work completed in Track 2.

¹³ POR Decision, Appx. A at 1, D.20-05-053 (May 28, 2020).

¹⁴ Phase Two Decision Adopting Safety Model Assessment Proceeding (S-MAP) Settlement Agreement with Modifications at 4, D.18-12-014 (Dec. 20, 2018).

¹⁵ Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities at Attach. 4 ¶ 11, D.19-04-020 (May 6, 2019).

¹⁶ Phase Two Decision Adopting Safety Model Assessment Proceeding (S-MAP) Settlement Agreement with Modifications at 44, D.18-12-014 (Dec. 20, 2018) (approving S-MAP settlement in part because "[t]he proposed [Settlement Agreement] retains flexibility to add new features ... faster than it would have otherwise been accomplished").

II. PG&E’S PROPOSED SLATE OF SAFETY AND OPERATIONAL METRICS

The Assigned Commissioner’s Ruling provides for PG&E to propose a portfolio of SOMs that, taken together, would “both address the Enhanced Oversight and Enforcement Process envisioned in [the POR Decision] and build upon previously adopted metrics to provide a means to accurately assess safety and operational performance by an electric and gas IOU.”¹⁷ The SOMs should include “the most relevant and meaningful safety metrics from those previously adopted,” be potentially applicable to other utilities, and take into account an enumerated list of the Commission’s previous metrics-related directives, guidelines, and initiatives.¹⁸

The suite of proposed SOMs, both as a group and (where possible) individually, are chosen not only to provide observable and objective performance data of a type suitable for triggering escalating levels of oversight and enforcement, but are also forward-looking leading indicators of safety and operational performance.¹⁹ PG&E here proposes twelve specific metrics to serve as SOMs:

Metric	Leading / Lagging	Outcome- Based	Objective	Bench- marks	Safety	Reliab.	Service / Mgmt.	Risk(s)
Serious Injuries and Fatalities (SIF)—Actual (Employee & Contractor)	Lagging	✓	✓	✓ ²⁰	✓			Employee and Contractor Safety
SIF—Potential (Employee & Contractor)	Leading	✓	✓		✓			Employee and Contractor Safety
Gas Dig-In Rate	Leading	✓	✓	✓	✓			Loss of Containment on Gas Transmission or Distribution Pipeline

¹⁷ Assigned Commissioner’s Ruling at 1-2.

¹⁸ Assigned Commissioner’s Ruling at 2-3.

¹⁹ Assigned Commissioner’s Ruling at 2, 4.

²⁰ Industry benchmarking is available for SIF Actual Count (Employee only), which can be used to inform the *SIF—Actual (Employee & Contractor)* SOM.

Metric	Leading / Lagging	Outcome- Based	Objective	Bench- marks	Safety	Reliab.	Service / Mgmt.	Risk(s)
Large Overpressure Events	Lagging	✓	✓		✓			Loss of Containment on Gas Transmission or Distribution Pipeline
Gas Emergency Response	Leading	✓	✓	✓	✓		✓	Loss of Containment on Gas Transmission or Distribution Pipeline
Reportable Fire Ignitions	Lagging	✓	✓	✓ ²¹	✓			Wildfire
Transmission and Distribution (T&D) Wires Down	Lagging	✓	✓	✓	✓			Failure of Electric Distribution Overhead Assets; Wildfire
Electric Emergency Response	Leading	✓	✓	✓	✓		✓	Failure of Electric Distribution Overhead Assets
Safe Dam Operating Capacity	Leading		✓		✓			Large Uncontrolled Water Release
DCPP Reliability & Safety Indicator	Leading	✓	✓	✓	✓			Nuclear Core Damaging Event
System Average Interruption Duration Index (SAIDI) (Unplanned)	Lagging	✓	✓	✓ ²²		✓	✓	Failure of Electric Distribution Overhead Assets
Average Speed of Answer for Emergencies	Leading	✓	✓	✓ ²³	✓		✓	Multiple Risks

Part II.A explains the criteria PG&E used to select this portfolio and how, taken together, that satisfy the objectives of the POR Decision and Assigned Commissioner’s Ruling. Part II.B describes the individual

²¹ *Reportable Fire Ignitions* is benchmarkable with other California IOUs.

²² Benchmarking for overall SAIDI is available, which is a more broad measure, but can help inform the SAIDI (Unplanned) component of performance through other information contained within industry benchmarking reports. Additionally, the other California IOUs track *SAIDI (Unplanned)*, allowing for benchmarking within the state.

²³ Benchmarking for overall ASA is available, which is a more broad measure, but can help inform performance of the Emergency ASA subset.

SOM and provides more information about their function. Part II.C places the SOMs in the context of additional triggers that will be considered in the Enhanced Enforcement process.

A. SELECTION CRITERIA AND OBJECTIVES

Taken as a whole, the SOMs that PG&E has proposed address the important interests and fulfill the specified objectives in the Assigned Commissioner’s Ruling.

PG&E’s SOMs address the Company’s most significant safety and reliability risks. As the Commission and parties are aware, PG&E undertakes a comprehensive analysis of its most significant safety risks as part of its Risk Assessment and Mitigation Phase (RAMP) proceeding. PG&E proposed SOMs “include the most relevant and meaningful safety metrics from those previously adopted by the Commission” in other proceedings.²⁴ This set of metrics also includes Key Risk Indicators for risks representing 98% of PG&E’s safety risk and 89% of PG&E’s reliability risk as reflected in the Company’s Corporate Risk Register.²⁵ They address all of the key categories of safety risks: employee and contractor safety, loss of containment on gas pipelines, wildfires, failure of electric distribution overhead assets, large uncontrolled water releases, and nuclear core-damaging events. The metrics thus align with the Assigned Commissioner’s Ruling’s fundamental objectives.

Leading metrics figure prominently.²⁶ Leading metrics, which have a track record as predictors of future outcomes or trends, play a larger role in these SOMs than they have in previous initiatives. Leading metrics, by their nature, are generally less likely to be “outcome-based,” as the Assigned Commissioner’s Ruling contemplates.²⁷ But whereas just seven of the twenty-six Safety and

²⁴ Assigned Commissioner’s Ruling at 2-3.

²⁵ The percentages are based on the combined total safety and reliability attribute scores as measured by PG&E’s multi-attribute value function.

²⁶ Assigned Commissioner’s Ruling at 2.

²⁷ Assigned Commissioner’s Ruling, Attach. A at ¶ H.

Performance Metrics were designated as leading,²⁸ metrics that can indicate root causes of risk events make up half of the SOMs proposed here.

The SOMs rely on objective data, are outcome-based, and measure factors that are primarily within the utility's control.²⁹ PG&E's SOMs reflect the best practices and guidance that has arisen during the Commission's and the industry's risk-based decision-making and metrics initiatives over the years. Each metric tracks objective events or data that do not depend on subjective interpretation, as the Assigned Commissioner's Ruling and POR Decision emphasize,³⁰ and metrics have been chosen and defined to reinforce their reliability. In measuring risks around the loss of gas containment, for example, PG&E is using *Gas Dig-In* rate, which measures reported incidents and data maintained by third parties.³¹ In other cases, where the use of internal data is essential, PG&E has implemented or is implementing auditing and controls around, for example, the *SIF—Potential and Reportable Fire Ignitions* measurements to promote the objectivity and reliability of the data. All will be subject to both extensive internal controls and “[r]igorous regulatory audits.”³²

The SOMs are outcome-based.³³ The Assigned Commissioner's Ruling also emphasized that well-chosen outcome-based metrics are preferable to “program targets,” as “getting work done is not necessarily the same as doing the right work or doing the work right.”³⁴ All but one of the SOMs that PG&E proposes here are outcome-based. The one exception, *Safe Dam Operating Capacity*, provides

²⁸ Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities at Attach. 1, D.19-04-020 (May 6, 2019).

²⁹ Assigned Commissioner's Ruling, Attach. A at ¶¶ F.

³⁰ Assigned Commissioner's Ruling, Attach. A at ¶ G.

³¹ Total USA tickets are determined by the California one-call system, independent to PG&E. All dig-ins to PG&E facilities are reviewed by the Damage Prevention DiRT team to determine appropriate delineation of first-party, second-party or third-party dig-in. Additionally, PG&E's Internal Audit Department reviews the controls and process for metric data collection and reporting, and PG&E's management approves the results. PG&E also tracks additional metrics to monitor drivers of both ticket volume and dig-in counts to complement the ratio metric.

³² Assigned Commissioner's Ruling, Attach. A at ¶ G.

³³ Assigned Commissioner's Ruling, Attach. A at ¶ H.

³⁴ Assigned Commissioner's Ruling, Attach. A at ¶ H.

an important measurement of PG&E *preparedness* for possible high reservoir inflow conditions. PG&E is not aware of any similarly valuable metric on this issue in use in the industry, and the *Safe Dam Operating Capacity* metric is paired with another nuclear-focused metric that *is* outcome-based, the industry-standard *DCPP Reliability & Safety Indicator*. Excluding this one programmatic metric would weaken, rather than strengthen, the value of the SOMs as a whole.

The SOMs can be benchmarked, to the extent practical, against and used by other utilities.

While the SOMs must serve their enforcement purpose, they are also for “use to gauge the safety and operational performance of all gas and electric utilities.”³⁵ While different utilities will necessarily require different metrics or targets in some instances,³⁶ there is value in using benchmark-able and industry standard measurements where such metrics are available: They can help promote consistent progress and a culture of best practices; enable target-setting that, where appropriate, considers relative performance within the industry; and reflect broad expertise among stake-holders. Accordingly, the majority of PG&E’s SOMs utilize industry-wide or California-wide benchmarks.

At the same time, the Assigned Commissioner’s Ruling recognized that “strictly limiting the metrics list to metrics that are collected by all the utilities may not be feasible.”³⁷ Where PG&E’s proposals deviate from commonly accepted benchmarks, metrics already adopted by the Commission, or measure data that has no industry benchmark, it is to enhance PG&E’s accountability or because the metric best designed to measure PG&E’s own performance.³⁸ For example, whereas the gas dig-in metric used in the Safety Performance Metrics counts only third-party dig-ins, PG&E’s proposed SOM

³⁵ Assigned Commissioner’s Ruling at 1-2.

³⁶ Assigned Commissioner’s Ruling, Attach. B at ¶ 3 (“Collecting metrics that are consistent across the utilities will be useful for benchmarking purposes; however, strictly limiting the metrics list to metrics that are collected by all the utilities may not be feasible given that risks vary across utilities.”).

³⁷ Assigned Commissioner’s Ruling, Attach. B at ¶ 2.

³⁸ See Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities at Attach. 1, D.19-04-020 (May 6, 2019).

would also include dig-ins caused by PG&E itself. Similarly, large overpressure events are an effective measure of PG&E’s safety and operational performance and its potential impact on customers, and an important one, but overpressure events of that nature are not tracked by benchmarkable industry-standard metrics.

*The SOMs track “quality of service and quality of management” issues.*³⁹ Taken together, the proposed SOMs also provide a representative, objective assessment of PG&E’s service and management priorities. As an initial matter, metrics that capture key safety and reliability risks go to the very heart of service and management priorities; taken as a whole, the SOMs appropriately address those issues. In addition, several metrics are specifically targeted at the customer experience. The SOMs will measure the *Average Speed of Answer for Emergencies*, capturing the length of time that customers wait for their emergency calls to connect to PG&E’s contact centers, including during PSPS events. The *Gas Emergency Response* and *Electric Emergency Response* SOMs also measure customer waiting times during the most critical moments. And the *SAIDI (Unplanned)* metric measures the duration of unplanned sustained outages that the average customer experiences in a year. These service, management, and customer-facing metrics will be supplemented by several wildfire-related metrics as discussed below.

B. DEFINITIONS AND KEY CHARACTERISTICS

PG&E proposes twelve SOMs, which are described herein, including the proposed definition and key characteristics of each metric.

1. SIF—ACTUAL (EMPLOYEE & CONTRACTOR)

The *SIF—Actual* metric is a safety measure relevant to employee and contractor safety risks, and is defined as follows:

³⁹ POR Decision at 96; Assigned Commissioner’s Ruling at 2.

Any injury or illness resulting from work at/for PG&E that results in:

- A fatality – a work-related fatal injury or illness;
- A life threatening injury or illness – a work-related injury or illness that, if not addressed, could lead to a fatality, or a work-related injury or illness that required immediate life-preserving rescue action, and if not applied immediately, would likely have resulted in the death of that person; or
- A life-altering injury or illness – a work-related injury or illness that resulted in a permanent and significant loss of a major body part or organ function.

This metric is benchmarkable, outcome-based, and relies on objective data. It is drawn from the SPMs.⁴⁰

2. SIF—POTENTIAL (EMPLOYEE & CONTRACTOR)

The *SIF—Potential* metric is a safety measure relevant to employee and contractor safety risks, and is defined as follows:

An incident that had the credible potential to cause a fatality, life-altering injury or illness or life-threatening injury or illness.⁴¹

This metric is a leading indicator, outcome-based, and relies on objective data. It is reported to the CPUC. Coupled with the SOM for *SIF—Actual*, these paired metrics meet the goals of SOMs and meet all the criteria for doing so.⁴²

3. GAS DIG-IN RATE

The *Gas Dig-In Rate* metric is a safety measure relevant to risks regarding the loss of containment on gas pipelines, and is defined as follows:

Number of gas dig-ins per 1,000 Underground Service Alert (USA) tickets received for gas. The dig-in component tracks all dig-ins to PG&E gas subsurface installations. A gas dig-in refers to damage which occurs during excavation activities (impact or exposure) and results in a repair or replacement of an underground gas facility.

⁴⁰ PG&E proposes to evaluate this metric on a rolling-average basis as discussed in Section III.

⁴¹ For purposes of the SIF-Potential metric, PG&E proposes to incorporate the definitions of “life threatening injury or illness” and “life-altering injury or illness” as identified in SIF-Actual metric.

⁴² PG&E proposes to evaluate this metric on a rolling-average basis as discussed in Section III.

This metric is a leading indicator, benchmarkable, outcome-based, and relies on objective data. It is similar to the Gas Dig-In Rate used in the SPMs, except that the SPM metric counts only third-party gas dig-ins.

4. LARGE OVERPRESSURE EVENTS

The *Large Overpressure Events* metric is a safety measure relevant to risks regarding the loss of containment on gas pipelines, and is defined as follows:

Count of large overpressure events. The established pressure limits for large OP events are:

- High pressure gas distribution
 - o (MAOP 1 psig to 12 psig) greater than 50% above MAOP
 - o (MAOP 12 psig to 60 psig) greater than 6 psig
- Low pressure gas distribution by 16 inches water-column
- Transmission pipelines by 10% MAOP (or the pressure produces a hoop stress of $\geq 75\%$ Specified Minimum Yield Strength [SMYS], whichever is lower)

This metric is outcome-based and relies on objective data. It is reported to the CPUC. As noted above, there is currently no industry-wide metric against which PG&E's performance can be benchmarked, but its value and importance support its inclusion.⁴³

5. GAS EMERGENCY RESPONSE TIME

The *Gas Emergency Response Time* metric is a safety measure relevant to risks regarding the loss of containment on gas pipelines, as well as a quality of service and management measure, and is defined as follows:

Measured from the time PG&E is notified to the time a Gas Service Representative (or a qualified first responder) arrives onsite to the emergency location (including Business Hours and After Hours). The metric measures the average response time for immediate response orders for the performance period.

⁴³ PG&E proposes to evaluate this metric on a rolling-average basis as discussed in Section III.

This metric is a leading indicator, benchmarkable, outcome-based, and relies on objective data. It is drawn from the SPMs.

6. REPORTABLE FIRE IGNITIONS

The *Reportable Fire Ignitions* metric is a safety measure relevant to wildfire risks, and is defined as follows:

Powerline-involved fire incidents annually reportable to the CPUC per D.14-02-015 and within the utility's High Fire Threat District. A reportable fire incident includes all of the following: (1) Ignition is associated with the utility's powerlines (both transmission and distribution); (2) something other than the utility's facilities burned; and (3) the resulting fire traveled more than one meter from the ignition point.

This metric is benchmarkable,⁴⁴ outcome-based, and relies on objective data. It is drawn from the SPMs.⁴⁵

7. TRANSMISSION AND DISTRIBUTION WIRES DOWN

The *Transmission and Distribution Wires Down* metric is a safety measure relevant both to wildfire risks and to the risk of failure of electric distribution overhead assets and is defined as follows:

Instances where a normally energized electric transmission or primary distribution conductor is broken, or remains intact, and falls from its intended position to rest on the ground or a foreign object. A conductor is considered energized unless confirmed in an idle state (i.e., normally de-energized)—excludes Major Event Days as defined by the IEEE.⁴⁶

This metric is benchmarkable, outcome-based, and relies on objective data. It is drawn from the SPMs.

8. ELECTRIC EMERGENCY RESPONSE TIME

The *Electric Emergency Response Time* metric is a safety measure relevant to the risk of failure of electric distribution overhead assets, as well as a quality of service and management measure, and is defined as follows:

⁴⁴ *Reportable Fire Ignitions* is benchmarkable with other California IOUs.

⁴⁵ PG&E proposes to evaluate this metric on a rolling-average basis as discussed in Section III.

⁴⁶ See IEEE Standard 1366.

Percentage of time that utility personnel respond (are on site) within 60 minutes after receiving a 911 call (electric related), with onsite defined as arriving at the premises to which the call relates.

This metric is a leading indicator, benchmarkable, outcome-based, and relies on objective data. It is drawn from the SPMs.

9. SAFE DAM OPERATING CAPACITY

The *Safe Dam Operating Capacity* metric is a safety measure relevant to the risk of a large uncontrolled water release, and is defined as follows:

Measure of the availability of low-level outlet valves, power tunnels and gates that can be controlled at hydro facilities to release water under high reservoir inflow conditions.

This metric is a leading indicator, outcome-based, and relies on objective data. As noted above, there is currently no industry-wide metric against which PG&E's performance can be benchmarked, but this metric measures performance in an important area where no other metric applies, and its value and importance supports its inclusion.

10. DCPD RELIABILITY & SAFETY INDICATOR

The *DCPD Reliability & Safety Indicator* metric is a safety metric relevant to the risk of a Nuclear Core Damaging Event, and is defined as follows:

Indicator consists of 11 US nuclear industry benchmarkable indicators indicating reliability and safety performance of units. Elements are rolling performance up to 3 years (1) Unit Capability Factor % (2) Online Reliability Loss Factor % (3) Loss Events (excluding scrams) (4) Unplanned Weighted Manual and Automatic Scrams (5) High-Pressure Safety Injection System Performance (6) Auxiliary Feedwater System Performance (7) Emergency AC Power System Performance (8) Sustained Fuel Reliability (9) Chemistry Effectiveness Indicator Revised (10) Collective Radiation Exposure (11) Total Industrial Safety Accident Index

This metric is a leading indicator, benchmarkable, outcome-based, and relies on objective data.

11. SAIDI (UNPLANNED)

The *SAIDI (Unplanned)* metric is a reliability metric relevant to the risk of a failure of electric distribution overhead assets, as well as a quality of service and management measure, and is defined as follows:

The number of minutes associated with unplanned sustained outages that the average customer experiences in a year. It measures all T&D outages and excludes Major Event Days.

This metric is benchmarkable,⁴⁷ outcome-based, and relies on objective data. It is reported to the CPUC.

12. AVERAGE SPEED OF ANSWER FOR EMERGENCIES

The *Average Speed of Answer for Emergencies* metric is a safety measure relating to multiple risks, as well as a quality of service and management measure, and is defined as follows:

Average Speed of Answer (ASA) in seconds for Emergency calls handled in Contact Center Operations.

This metric is a leading indicator, outcome-based, benchmarkable,⁴⁸ and relies on objective data.

C. RELATIONSHIP TO OTHER ENHANCED ENFORCEMENT TRIGGERS

In addition to satisfying the requirements that the Assigned Commissioner's Ruling establishes for the SOMs, PG&E's proposed metrics will also work together with other triggers to provide a basis for other key determinations that the Enhanced Enforcement Process contemplates.

First, the SOMs encompass "electric reliability" metrics. Whereas the Enhanced Enforcement Process's Step 1 trigger focuses on SOMs and certain other metrics, Step 2 emphasizes, among other

⁴⁷ Benchmarking for overall SAIDI is available, which is a more broad measure, but can help inform the SAIDI (Unplanned) component of performance through other information contained within industry benchmarking reports. Additionally, the other California IOUs track *SAIDI (Unplanned)*, allowing for benchmarking within the state.

⁴⁸ Benchmarking for overall ASA is available, which is a more broad measure, but can help inform performance of the Emergency ASA subset.

considerations, “electric reliability performance metrics.”⁴⁹ The *SAIDI (Unplanned)* metric included in the SOMs is an industry-standard, objective, benchmarkable, outcome-based measure of electric reliability affected by system equipment failures. Moreover, it is a metric chosen to broadly measure the reliability of PG&E’s system that encompasses all possible causes of unplanned outages. It is accompanied by other proposed metrics aimed at the potential consequences of such equipment failures. This suite of SOMs thus provides the electric reliability data that considered in connection with the Enhanced Enforcement Process’s Step 2 reliability trigger. A prolonged or significant failure to meet and mitigate the reliability metrics in the SOMs can be the driving factor in implementing the Step 2 reliability trigger in the Enhanced Enforcement Process.

Second, PG&E’s Wildfire Mitigation Plan includes four key metrics for Enhanced Enforcement Process purposes. The Enhanced Enforcement Process’s Step 1 triggers include, in addition to SOM-related violations, failures related to “metrics ... set forth in [PG&E’s] approved wildfire mitigation plan.”⁵⁰ These wildfire-related metrics will thus be considered alongside the SOMs proposed here, and should be understood as part of the suite of metrics at issue for Enhanced Enforcement Process purposes. Those Wildfire Mitigation Plan (“WMP”) metrics will include the following:

- *System Hardening Effectiveness*
- *Enhanced Vegetation Management Effectiveness*
- *PSPS Notification Accuracy*
- *PSPS Restoration*

While PG&E has not proposed to define and set targets for these metrics within this proceeding, to avoid duplication and inconsistency with the WMP process, they should be recognized as part of the analysis

⁴⁹ POR Decision, Appx. A at 3, D.20-05-053 (May 28, 2020).

⁵⁰ POR Decision, Appx. A at 1, D.20-05-053 (May 28, 2020).

that will go into Enhanced Enforcement decisions along with the SOMs. They include additional service, management, and customer-experience measures that the Assigned Commissioner’s Ruling contemplates.

Finally, metrics can measure progress toward safety and risk investments. The Enhanced Enforcement Process considers, in its triggers for Step 1, whether PG&E has “demonstrate[d] insufficient progress toward approved safety or risk-driven investments.”⁵¹ PG&E submits that focusing on the major risk areas identified in PG&E’s RAMP, and measuring the work accomplished as a percentage of the recorded spending compared to the imputed authorized funding amounts in the General Rate Case and Gas Transmission and Storage Case, can provide an appropriate framework for assessing this Step 1 trigger.

To measure safety and risk investments PG&E defines the group of safety and risk investments as the mitigations and control programs associated with its top safety risks. PG&E will determine the imputed authorized funding amount and recorded spending for each mitigation and control at either the major work category (MWC) or Maintenance Activity Type (MAT) level and compare the imputed authorized funding to the recorded costs. PG&E will calculate the percent variance between the imputed authorized funding amount and the recorded costs and further analyzes those activities where PG&E underspent the imputed authorized amount. PG&E will provide an explanation where PG&E underspends its imputed authorized funding. While PG&E will provide an annual update on its risk and safety investments, the analysis will ultimately be based on the total program spend over a three-year or four-year period to align to the rate case funding cycle. PG&E’s goal is to evaluate its investment against the rate-case period investment.

⁵¹ POR Decision, Appx. A at 2, D.20-05-053 (May 28, 2020).

PG&E will use the data it provides to the Commission in the annual Spending Accounting Report (SAR) and Risk Spend Accountability Report (RSAR)⁵² as the source for the risk and safety investments analysis. PG&E proposes modifying the existing report to include an additional section where it will present the annual safety and investment spending analysis described above.

III. FUTURE STEPS IN THIS PROCEEDING

The Assigned Commissioner's Ruling directs PG&E's to open this Track 2 by presenting proposed metrics. Consistent with the Assigned Commissioner's Ruling, PG&E has consulted with the other investor-owned utilities. Those utilities have indicated that they will submit comments, as appropriate, in accordance with the timelines in the Assigned Commissioner's Ruling.

While PG&E need not, and is not, proposing "specific targets at this time,"⁵³ PG&E looks forward to the process of setting targets appropriate for the specific purposes required here.

The choice of targets should recognize that, under the Enhanced Enforcement Process, consideration is given both to "compl[iance]" with targets and "progress" over time,⁵⁴ including "over an extended period."⁵⁵ Depending on the metric, different utilities may have different starting positions that merit different targets; for a utility that begins in the top quartile of a benchmarkable metric, for example, continuous improvement may be impossible, whereas a utility that has a long way to go may be expected to show steady but "attainable"⁵⁶ progress. Some metrics may lend themselves to annual snapshots, while others give better insight when tracked over time;⁵⁷ the Commission's own analyses

⁵² The RSAR report is required per the Phase Two decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and multi-Jurisdictional Utilities, D. 19-04-020.

⁵³ Assigned Commissioner's Ruling at 2.

⁵⁴ POR Decision, Appx. A at 1, D.20-05-053 (May 28, 2020).

⁵⁵ POR Decision, Appx. A at 5, D.20-05-053 (May 28, 2020).

⁵⁶ POR Decision at 38.

⁵⁷ For example, metrics that track a very low number of incidents, like the *SIF* metrics and *Large Overpressure Events*, can be distorted by only modestly lower or higher incidents in a single year, making three-year averages a

have recognized both ten-year and three-year rolling averages for appropriate purposes.⁵⁸ And targets used for one purpose may be inappropriate for other purposes: For example, the internal targets used as employee incentive compensation thresholds, which by definition incorporate “stretch goals,” may be wholly inappropriate for the decision to initiate enforcement action. PG&E will be prepared to propose appropriate targets once the SOMs have been established.

IV. CONCLUSION

PG&E respectfully submits the attached Safety and Operational Metrics and looks forward to the comments of the other utilities and intervenors, a constructive dialogue at the January 28th workshop, and a collaborative process to establish SOMs that can serve both the Enhanced Enforcement Process and industry-wide safety and operational purposes.

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more indicative of the utility’s safety and operational performance. PG&E will work with the parties to identify appropriate metrics for such rolling-average targets. To the extent PG&E lacks sufficient historical data to calculate a three-year lookback for a metric that is designated for such analysis, PG&E will propose to calculate and report the metric on an annual basis until sufficient data exists for the metric to become a triggering event.

⁵⁸ *Safety Policy Division Review of Pacific Gas and Electric Corporation’s 2020 Safety Performance Metrics Submittal Pursuant to Decision 19-04-020* at 4, 33 (2021).

Respectfully Submitted,

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